## CLAIMS

1. An electrocardiograph system comprising:

an acquisition element adapted to be coupled to a patient through a set of relatively short leadwires; and

a hand-held, battery powered portable processing element coupled to the acquisition element through a connector cable and controlled through a graphical user interface.

- 2. The electrocardiograph system as in claim 1 wherein the processing element further comprises a display.
- 3. The electrocardiograph system as in claim 2 wherein the display further comprises a liquid crystal display.
- 4. The electrocardiograph system as in claim 3 wherein the liquid crystal display further comprises a color or monochrome graphical display with sufficient resolution to display waveforms.
- 5. The electrocardiograph system as in claim 2 wherein the display further comprises a touch screen interface.
- 6. The electrocardiograph system as in claim 1 wherein the processing element further comprises a compact flash card or similar memory expansion slot.
- 7. The electrocardiograph system as in claim 6 wherein the compact flash expansion slot further comprises a compact flash read only memory disposed in the compact flash card expansion slot.

- 8. The electrocardiograph system as in claim 1 wherein the processing element further comprises an infrared transceiver for communications.
- 9. The electrocardiograph system as in claim 1 wherein the processing element further comprises a radio frequency transceiver for communications.
- 10. The electrocardiograph system as in claim 1 wherein the processing element further comprises an audio recording unit.
- 11. The electrocardiograph system as in claim 1 wherein the acquisition element further comprises a plurality of signal conditioning circuits.
- 12. The electrocardiograph system as in claim 1 wherein the acquisition unit further comprises a baseline sway filter.
- 13. The electrocardiograph system as in claim 1 wherein the acquisition unit further comprises a pacemaker pulse detector adapted to detect pacemaker signals.
- 14. The electrocardiograph system as in claim 1 wherein the acquisition unit further comprises analysis and interpretation.